

A NEW RUMINANT FROM THE PLEISTOCENE OF NEW MEXICO.

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In excavating for the new irrigation dam at Black Rocks, $4\frac{1}{2}$ miles east of Zuni, New Mexico, a number of fossil bones have recently been unearthed, which were preserved by Mr. John B. Harper, engineer in charge of the work. These bones were secured and presented to the U. S. National Museum by the Department of the Interior, through Mr. F. E. Leupp, Commissioner of Indian Affairs.

The little collection from Zuni contains teeth and bone fragments of *Elephas columbi* and other characteristic Pleistocene species, together with the top and back portions of a skull representing an undescribed genus of the Bovidae family, apparently closely related to *Oribos*.

This specimen, though incomplete and battered, is of especial interest, coming from this locality. Its incompleteness and poor condition make it a rather unsatisfactory type, yet there are sufficient distinctive characters preserved to warrant its description.

LIOPS, new genus.

Generic characters.—Horn cores set wide apart and well back, as in *Oribos*, but much less drooping; continuous with the frontals laterally, with no burrs or rugosities at base; smooth throughout. Parietals forming a large part of the occiput, which is high and narrow above. No true lambdoidal crest. Foramen magnum about one and one-half times greater in diameter than in *Oribos*. Occipital condyles set widely apart, with their borders continuous with the surrounding bones. Tympanic bone roughly triangular in shape, very smooth and flat, with no bulla, and tightly inclosed by the surrounding elements. Post-glenoid process reduced to a low rounded knob.

LIOPS ZUNIENSIS, new species.

Type, top and back portion of skull, Cat. No. 5100, U.S.N.M. collection.



FIG. 1.—LIOPS ZUNIENSIS, TOP VIEW OF SKULL (ABOUT $\frac{1}{4}$ NAT. SIZE).



FIG. 2.—LIOPS ZUNIENSIS, POSTERIOR VIEW OF SKULL (ABOUT $\frac{1}{4}$ NAT. SIZE).

A striking feature of the portion of the skull preserved is its extreme smoothness. Its angles are free from rugosities, and there

are no sharp or roughened processes even in the tympanic and mastoid region. The horn cores are relatively longer, less robust, and less drooping than in *Ovibos* or *Simbos*, the latter standing directly intermediate between *Liops* and *Ovibos* in this respect. Another striking



FIG. 3.—*LIOPS ZUNIENSIS*, PALATAL VIEW OF SKULL (ABOUT $\frac{1}{2}$ NAT. SIZE).

feature is the position of the relatively large foramen magnum, which is confined entirely to the back or occipital face of the skull.

Liops is apparently much more closely allied to *Ovibos* than either of the California Pleistocene genera, *Euceratherium* and *Preptoceros*, and seems, without question, to belong to the subfamily *Ovibovinae*.